

<b>FINAL</b> %	
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**TRL3708  
TRL 308C**

**MAY/JUNE 2014**

**LOGISTICS SYSTEMS**

STUDENT NUMBER									

IDENTITY NUMBER											

<b>FOR USE BY EXAMINATION INVIGILATOR</b>
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Question Number	Marks					
	Examiners					
	1	2	3	4	5	6
1						
2						
3						
4						
Total						

Subject

Number of paper

Date of examination

Examination centre

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**TRL3708**

May/June 2014

**LOGISTICS SYSTEMS**

Duration 2 Hours

70 Marks

**EXAMINERS**

FIRST

SECOND

EXTERNAL

MRS NJ MATSOMA

PROF A BRITS

PROF JH DU PLESSIS

Closed book examination

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**This exam question paper consists of 16 pages, including 2 pages for rough work.**

**INSTRUCTIONS.**

1. **WRITE YOUR ANSWERS ON THIS EXAMINATION SCRIPT AND HAND IT TO THE INVIGILATOR WHEN YOU HAVE FINISHED.**
2. **ON THE FRONT COVER OF THIS EXAMINATION SCRIPT, DRAW A CIRCLE AROUND THE QUESTION NUMBER OF EACH OF THE LONG QUESTIONS THAT YOU ANSWER.**
3. **READ THROUGH ALL OF THE QUESTIONS CAREFULLY**

**THIS EXAMINATION PAPER CONSISTS OF TWO SECTIONS [15 PAGES]:****SECTION A: (COMPULSORY) ANSWER ALL THE SHORT QUESTIONS (20 MARKS)****SECTION B: ANSWER ANY TWO (2) OF THE THREE (3) LONG QUESTIONS (50 MARKS)**

**PLEASE NOTE: ONLY THE FIRST TWO (2) QUESTIONS THAT YOU ANSWER WILL BE MARKED. YOU WILL NOT BENEFIT IN ANY WAY IF YOU ANSWER ALL THREE (3) LONG QUESTIONS.**

**TOTAL: (70 MARKS)**

**SECTION A**  
**ANSWER ALL THE QUESTIONS IN THIS SECTION.**  
**SUB TOTAL: 20 MARKS**

**QUESTION 1**

**1.1** Explain what is involved in supply chain information (SCI) system **(2)**

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**1.2** Give a schematic presentation of a direct logistics structure. **(3)**

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1.3 Explain one of the four situations under which a flexible logistics operating system is justified (3)

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1.4 Explain supply chain visibility as one of the factors that ensures effective planning in logistics (2)

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1.5 Explain the term 'threshold service'

(2)

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1.6 Explain cost minimisation as one of the strategies of logistics formulation

(3)

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1.7 Explain the simulation inventory technique as one of the logistics models

(3)

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1.8 Name two methods used in logistics to calculate the cost of transport

(2)

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[20]

[TURN OVER]

**SECTION B**  
**ANSWER ANY TWO (2) OF THE THREE (3) QUESTIONS IN THIS SECTION.**  
**SUBTOTAL: 50 MARKS**

**QUESTION 2**

2 1 The tendency in business is to move away from the traditional anticipatory business model to a more response-based model. Discuss the benefits of using a responsive and an anticipatory business model (10)

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2 2 Explain the two main types of postponement in logistics, namely, manufacturing postponement and logistics or geographic postponement **(5)**

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3 2 Fully discuss Advance Planning System (APS) as one of the planning systems in logistics, focusing on the following **(16 marks)**

(i) Demand management **(4)**

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(ii) Resource management **(4)**

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(iii) Resource optimisation (4)

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(iv) Resource allocation (4)

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4 2 Explain the transport analysis techniques applied in logistics, namely, the exact approach and the interactive approach **(10)**

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**Examiners:**

**First : Mrs NJ Matsoma**

**Second: Prof A Brits**

**External: Prof JH Du Plessis**